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Original Communications.

TYPHOID FEVER AND PLEURISY.

By W. C. B. FIFIELD, M.D. Harv.

AT a recent meeting of the Boston Society for Medical Improvement, the subject of pleurisy as a complication of typhoid fever, or as occurring after typhoid, to delay convalescence or even to entirely prevent recovery, was to a limited degree discussed; and, as a case reported by myself of extensive pleuritic effusion occurring after typhoid fever, and cured by the operation of thoracentesis, was received with some expressions of incredulity and some intimations of imperfect observation, I shall now re-open the subject, as I deem it of great importance. I believe that when it is more publicly recognized and taught that pleurisy is not a very uncommon complication or sequel of typhoid fever, the neglect of auscultation and percussion, both during and after typhoid fever, on the ground of pleurisy being almost an impossibility, will be regarded as a very great omission of duty, to say the least. I doubt not that graves have been and will be filled from such neglect, caused by the belief in the exceeding rarity of pleurisy in typhoid fever. My attention to this point was first attracted by a case in the practice of Dr. C. E. Stedman, whose notes and beautiful diagram I copy.

"Fatal case of typhoid fever in a robust patient, æt. 34 years. Prodromata marked for weeks. During first week, nausea and vomiting, rendering diagnosis cloudy and treatment difficult. No cerebral or abdominal symptoms during first week. Headache only one day. No rose-spots or sudamina throughout. Tympany marked for a few days only, in the beginning of the fourth week. Occasional bleeding from the bowels relieved by brandy and kino. Pulse 100 to 115 during the first week; during second week, 130 to 140. Tongue very black, with much sordes; cleaned during the third week. Dejections every second or third day by enemata. Urine plentiful; catheter required only once, on the 26th day. Delirium busy and constant. Effusion probably took place in the left pleural cavity, on the twenty-second day, evinced by pain in the side, cough and elevation of temperature. Patient died Sept. 12th, 1870.

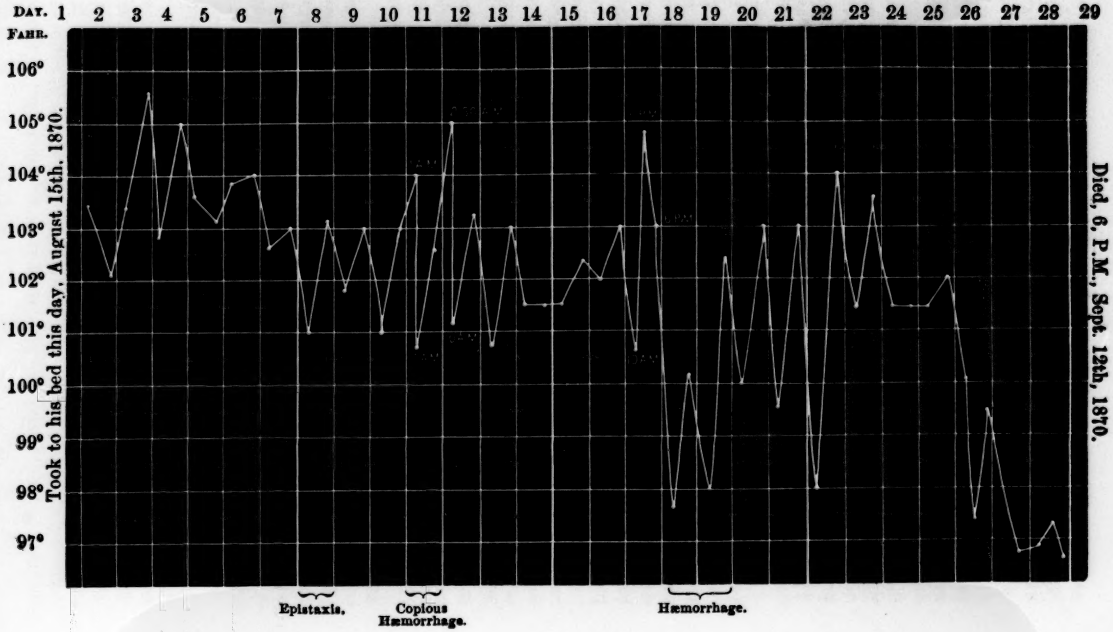
"*Autopsy.*—Head not opened. Three ounces of serum in pericar-

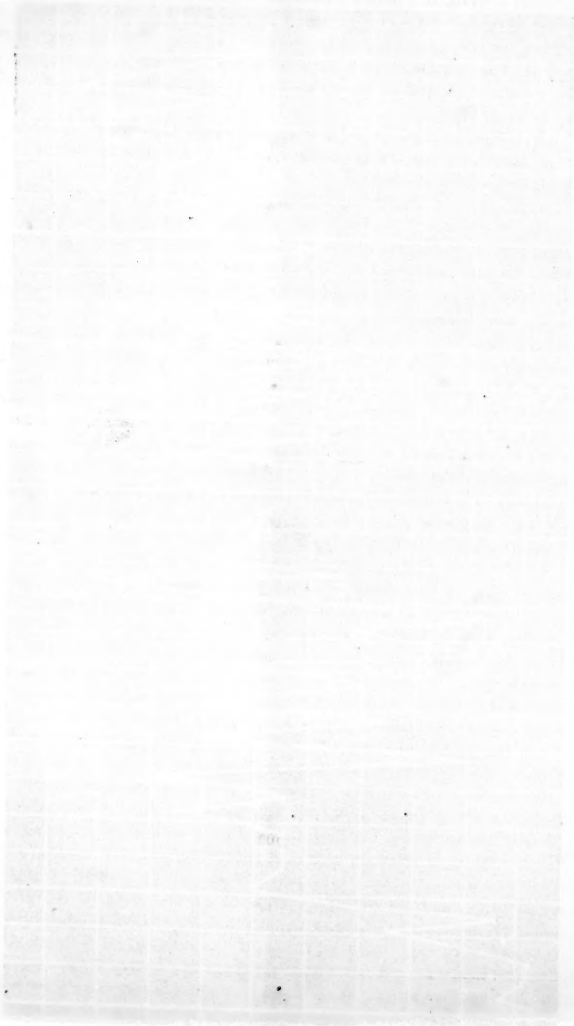
dium. Left pleura contains three pints of serum. Right lung hypostatically congested, with solid spots in centre. Stomach healthy. Spleen large but sound. Liver enlarged. Kidneys of the horse-shoe shape, with ureters crossing in front of the connecting mass; healthy. Peyer's patches in all shades of inflammation, from thickening to slough, increasing from above downward, till, at the ileo-cæcal valve, the ulceration encircled the opening. Colon healthy. The ulcer whence bleeding came seemed indicated by a thin clot encircling the edges."

The accompanying thermometric chart is interesting, as showing the sudden elevation of temperature at the onset of pleurisy. It will be readily seen that this was acute, and that the amount of effusion could not have had any great effect in the case, which, from the extensive ulceration and repeated hæmorrhages, must, in all probability, have proved fatal in any event.

CASE II.—November 24th, 1871, a man aged, perhaps, 28 years, came under my care as a case of typhoid fever, the most severe one I have ever seen recover. It would be tedious to give my full notes, with record of temperature; suffice it to say, that he had meteorism, diarrhœa, hæmorrhage from the bowels, &c. &c. On the 31st of January, 1872, he was removed to Boston, being then so feeble and emaciated that four hours were consumed in travelling four miles. Just before his removal, I had discovered dulness on percussion throughout lower two-thirds of left back, with faint bronchial respiration. He had, also, a teasing cough, with considerable expectoration. The diagnosis was pleuritic effusion, and treatment was instituted with that view. On the 11th of February, a consultation was held with Dr. Bowditch, who was inclined to consider it a case of phthisis, and advised his removal to a warmer climate. March 1st, he was removed to New York, having already gained in strength and lost nearly all his cough. In June, he returned to Boston quite well, weighing, perhaps, 180 pounds. I then carefully examined him, and found respiration perfect throughout both lungs.

CASE. III. is the one lately reported to the Society. Two boys were seen in a house on Ellsworth Street, in Boston; one about 11 years of age, the other 7. From this house, another brother had been, some time previously, removed to the City Hospital, where he went through an ordinary run of typhoid fever. The two lads seemed to my observation, as well as that of another physician, to have undeniable typhoid. On the 10th of February, they were found in the following condition. The eldest boy was sitting by the fire, miserably emaciated, but with good appetite, and on the high road to recovery. I should have mentioned that both boys had their chests carefully auscultated and percussed at a previous visit, but nothing remarkable noticed. The youngest was yet in bed, still more emaciated than his brother; had cough, a pulse of 120, and something of the peculiar, occasional delirium seen in patients who have had typhoid fever


Day. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29
Fahr.
106°
105°
104°
103°
102°
101°
100°
99°
98°
97°
Took to his bed this day, August 15th. 1870.
Died, 6. P.M., Sept. 12th, 1870.
Epistaxis.
Copious Hæmorrhage.
Hæmorrhage.



severely. Percussion perfectly flat throughout left back. Marked bronchial respiration to the same extent, with a fine râle at angle of the left scapula. Heart dislocated to right of sternum. Nothing of the Skodiac resonance noted at apex of left lung. I may here state that I do not remember to have ever heard this resonance, which has been so much spoken of in connection with pleuritic effusions, more than once in my life.

12th.—I punctured, first for diagnosis, with Dieulafoy's little aspirateur, then with the Potain, removing about a quart of serum. He has since entirely recovered.

Grisolle, in his Traité de Pathologie Interne, edition of 1859, p. 43, says:—"Capillary bronchitis, *pleurisy*, pneumonia, and passive congestion of the lungs are very common complications of typhoid fever. Pneumonia and pleurisy are rare complications at the commencement. They ordinarily occur only in the second or third week, or even much later."

Alexander Tweedie, in his Lectures on the Distinctive Characters, Pathology and Treatment of Continued Fevers, published in 1862, says, p. 89, op. cit.:—"In enteric fevers, there is a marked tendency to inflammation of serous membranes, and hence pleuritic inflammation is a frequent complication or secondary affection. It may not always be recognized by the general symptoms alone, but, by careful auscultation, its presence can scarcely be overlooked. It would appear to be less frequently observed in the typhoid affection of Paris, for Louis mentions that out of fifty cases he only met with it once. This infrequency of pleurisy as a complication of typhoid fever does not accord with the experience of British physicians, and from the susceptibility in this fever, to serous inflammations, more especially to pleurisy, it is well to be on the lookout for it even in mild cases. It is indicated by sudden chills and shivering, pain or stitch in the side on deep inspiration, disinclination to lie on the affected side, hurried breathing, pleural friction sound, with circumscribed dulness. These characteristic signs are not always present; indeed, in the greatest number of cases the disease is less open. There may be no rigor, little if any stitch, little or no hurry in breathing, perhaps only flushing and hot skin, to indicate that something is wrong. Examination of the chest seldom fails to reveal the secret, by creaking heard over the seat of the pleuritic inflammation, or, if the mischief has crept on still more insidiously, the percussion note is dull and the respiratory murmur absent [I wish he had said something about bronchial respiration, and about the fine râles heard, especially in pleuritic children], indicating the existence of fluid more or less copious in the pleural cavity. It is remarkable how rapidly the fluid accumulates in some cases, and with how little warning of the antecedent inflammation; hence the necessity of watching, in cases of enteric fever, however mild, for the first approach of pulmonary symptoms, which may surprise at any stage of the disease, or even during convalescence."

I am fully aware of whatever may be rough or imperfect in my observation; but if, by awakening the attention of medical men to the not very infrequent complication of typhoid fever with pleurisy, it induces a more frequent examination of the chest during the progress of enteric fever, and thereby perchance saves a life otherwise lost, I shall not esteem my labor worthless.

Harrison Square, March 3, 1873.

A CASE OF PARALYSIS OCCURRING DURING VARIOLOID.

By F. W. Goss, M.D. Harv.

Mrs. F., æt. 50, of nervous temperament, who had been under the care of a physician for what was called "nervous debility," on the morning of Sept. 19th, 1872, after known exposure to smallpox, showed upon her body and extremities the eruption of varioloid. Judging from the constitutional symptoms and the amount of the eruption, the attack was not severe, and in a day or two the patient was sitting up. During the 23d, she complained of a "gnawing pain" in the left arm, which, on the next day, was present in the right arm and in the lower extremities. Towards the evening of this day, she noticed that she could scarcely move her legs or feet, and the power of motion in the upper extremities was also impaired. On the 25th, she was unable to turn in bed; there was slight motion in the ankles, but she was unable to flex the legs or thighs. The forearms could be flexed upon the arms, and there was partial ability to move the latter at the shoulders, though she could not raise her arms to her head. There was no paralysis about the face; the tongue was protruded normally, the pupils were natural, the intellect and speech unaffected. No tenderness could be discovered on pressure over the spine, and nowhere over the body did sensation seem abnormal.

The pain, which she referred to the bones, gradually disappeared as the paralysis increased. On the morning of the 27th, the patient seemed to be totally paralyzed in the upper and lower extremities. The intellect remained clear, the face natural. Her voice seemed somewhat husky, and it was evident that she was rapidly failing. The next morning, she died.

The case suggests the inquiry as to the connection of the variolous disease with the paralysis; whether the former gave rise to the latter, or whether the paralysis would have occurred had the patient not been attacked with varioloid.

Writers speak of paraplegia, usually incomplete, as occurring sometimes in the initiatory stages of severe cases of smallpox, and that a loss of power over the extremities may also occur in the disease, when the system has been much reduced by its severity; but I have not been able to find any mention made of such loss of muscular power in so mild an attack as that experienced by this patient.

One gentleman, whose opportunities for the observation of smallpox have been exceptionally great, informs me that he has seen, in two or three cases of great severity, delirium and paralysis come on previous to death, but that he has met with no case corresponding to the one here reported.

Dudley Street, Boston Highlands.

Lecture.

THE MECHANISM OF PRODUCTION OF SYMPTOMS OF DISEASES OF THE BRAIN, AND THE CONCLUSIONS TO BE DRAWN FROM THE KNOWLEDGE OF THAT MECHANISM FOR THE TREATMENT OF THOSE DISEASES.

A Lecture delivered in Boston, April 5th, 1873, by C. E. Brown-Séquard, M.D.

Reported by Drs. S. G. Webber and J. J. Putnam.

In referring to the previous lecture, Dr. Brown-Séquard said that it was not possible to assign special functions to the different parts of the brain in view of the facts which we now possess. If, as we find, a portion of the brain is able to perform the functions of the whole, we must conclude, to be logical, that a given part of the brain has no function, or can take upon itself every function.

He spoke of the inhibitory action of nerves upon nerve contres, saying that lesions in the bowels or brain may produce symptoms due to the transmission of an irritation from the part affected to other parts.

In the previous lecture, several hypotheses were advanced. These were in accordance with true scientific principles, though they may soon be overthrown. One hypothesis was that each side of the brain is a whole brain; one hemisphere is sufficient for all the functions of the brain; one side may be destroyed and all the functions remain. Again, very few fibres are sufficient to communicate between the groups of cells at the base of the brain and the cord; of the multitude of fibres shown by the microscope all are not necessary; e.g., perhaps of fifty million, fifty may serve for transmitting the communications. This is seen after the destruction of a large part of the medulla oblongata, the functions remaining in the parts below.

An interesting study is found in the variety of effects which may be produced by an irritation. Injury to the trunk of a nerve may give rise to symptoms of brain disease, or inflammation at a distant part, or hæmorrhage, or, perhaps, not even excepting so-called malignant products, almost any change in the natural cells and constituents of parts. The same is seen when the brain is affected or the bowels.

The extent of power of an irritation in the brain is greater than when it is in other organs; thus, if parts of the medulla oblongata are pricked, we find a complete arrest of activity in every organ having dynamic power, heart, lungs, &c. A very slight irritation has great power.

In certain animals, we may find only arrest of respiration from a prick of the restiform body; or there may be only a loss of power of the will over muscles, the respiratory action continuing; or the heart alone may be arrested.

So, crushing the ganglia of the sympathetic in the abdomen will cause the heart to cease acting. This he had shown, in 1856, on rabbits, but it was not particularly brought to the notice of the profession until Goltz, in Germany, proved the same thing in frogs, that a blow on the belly would arrest the heart. But the same irritation may destroy the power of the will, without affecting the heart. Here we have the same phenomena following an irritation of the brain in the prick, or of a peripheral nerve, i. e. respiration ceases, the heart is arrested, the will is abolished.

Again, passing a current of carbonic acid forcibly into the larynx may stop convulsions of epilepsy, or those excited by strychnia, may arrest the heart and abolish the power of the will.

Very cold water injected into the ear in a well person may give rise to a state of perturbation, so that the person will turn round in a small circle, or will walk, as it were, on the sides of a square when attempting to walk on its diagonal. The same is seen in certain lesions of the brain.

Lesions may cause symptoms to appear in a very short time. If certain parts of the brain are pricked, very quickly there may be found in the lungs, in one part anæmia, in other parts œdema of a peculiar nature, the bloodvessels being crowded with white corpuscles, as was shown by Ranvier; also there may be emphysema, not caused as the two theories in vogue would lead us to suppose, during inspiration or during expiration, but resulting, when the lungs are at rest, without any movement, so that the two old theories are not the only true causes. Also, there may be ecchymosis and hæmorrhage in the lungs. Thus a great variety of lesions are found to arise immediately from lesion of the brain.

Time was wanting to pass in review the various viscera, the skull and meninges, to show a similar mechanism in their action when irritated.

The corpus striatum was considered the organ of the will by many, the optic thalamus the organ for sensation; these views are not right. These parts may be destroyed without symptoms following, and there may be many different symptoms from the same disease. A remarkable case was mentioned of a patient with an abscess in each corpus striatum, that in one being larger than the other. The only symptom present was anæsthesia on the same side with the larger abscess. Ollivier records a case of anæsthesia on the same side with the injured optic thalamus.

He said he now possessed a very large number, one hundred or more, of cases of brain disease with the symptoms appearing on the same side. Generally, the symptoms are on the opposite side, but in disease of certain parts they are on the same side. There is one corner where this is especially true, the pons, restiform body and over the petrous bone.

Again, hemiplegia may be due to pneumonia, as has been shown by Dr. Lépine, the paralysis occurring on the same side with the lung disease, or on the opposite side; so that irritation of nerve fibres in the lung may have an effect similar to lesion of the brain, and like that, on the same side or on the opposite side.

Lesion in the brain or in the periphery may cause epilepsy; so, also, irritation in certain parts of the brain or periphery may cause arrest of the epilepsy.

These cases of arrest of certain functions, as of respiration, of the

heart, or of the will, are due to the arrest of the activity of certain cells, place them where you will, which preside over such actions. Many kinds of morbid respiratory acts, hiccough, cough, gaping, sneezing, spasm of the glottis may be arrested by pressing on parts of the face or neck. By passing carbonic acid into the nostrils, headache may be relieved; this may also be used in asthma. Action of certain ganglia will stop the action of the bowels. The vaso-motor centre may be paralyzed by galvanizing the depressor nerve, so causing a general fulness of bloodvessels. The reflex faculty of the cord and medulla may cease when the skin of a frog's leg is pinched.

He has seen fifteen cases where drawing on the great toe caused the cessation of what is called spinal epilepsy; why this is so, he does not know. General epilepsy may be stopped when the loss of consciousness does not occur at the beginning of the fit, by drawing the parts which are convulsed. Contraction of the neck of the womb has recently been said by a Southern doctor, Dr. Washington, to cease on application of dry cups to the skin of the sacrum. Such facts show that the excitation goes to certain cells and causes cessation of this activity, and then the phenomena cease.

So in the brain, we must admit something similar; emotion may have such an effect. A prick of the arm, before bleeding, has caused syncope. So loss of consciousness in epilepsy depends on the loss of activity of cells. Contraction of bloodvessels of the brain cannot act quickly enough, and that can be only one way in which such loss is produced, but it is not the usual way. The loss of consciousness may occur with vessels full of blood, as is seen in Guinea pigs artificially epileptic in which the cervical sympathetic has been divided. They still have the epileptic loss of consciousness when the epileptogenous zone is irritated.

In syncope, the loss of consciousness is not dependent on cessation of the heart's action. The heart may stop and consciousness persist, or consciousness be lost and the heart act. The power of the will may continue even when the brain is full of bad blood.

In regard to treatment in view of the facts mentioned. A paralysis due to organic lesion may disappear at once under emotion, or an act of will, the paralysis being then cured, though the cause remains. It is desired to find something like this in applying treatment. The only thing is an irritation acting on the skin. Doing this, he has had opportunity of recalling a patient to life. After erysipelas of face, there was intense headache, hemiplegia and coma, and probably an abscess of the brain. He has been nearly cured and remained well long. He was in coma two or three times, and roused out of it by actual cautery applied to the head and between the shoulders. The iron must be heated to a white heat and passed lightly over the skin. There is no pain. He has found only one patient who refused a second application.

The application should be made on the paralyzed parts, limb or face, not over the spinal column, or if centrally, over the vaso-motor centre in the neck. In one case, he roused a patient out of coma by applying it to the head; and this was repeated many times, forty or fifty at least, during two years, and the patient died finally in coma, there being no one present to cauterize him.

Progress in Medicine.

REPORT ON OPHTHALMOLOGY.

By O. F. Wadsworth, M.D. Harv.

[Concluded from p. 445.]

Conjunctiva.

Treatment of Strumous Ophthalmia.—Power (*Practitioner*, October, 1872) believes that general treatment is insufficient in this disease, and, of local remedies, prefers calomel, atropine, and Pagenstecher's yellow ointment. These he has not, however, always found effective, and he strongly recommends the internal use of extract of belladonna, in doses of from one-sixth to one-fourth of a grain three times a day, as relieving intolerance of light and spasm of the orbicularis. He attributes its good effects to stimulant action on the sympathetic nerves, and so on the small vessels. It is of advantage, also, as obviating the necessity of purgatives through its action on the bowels. The seton over the temple, employed by some of the London surgeons, he regards only as a *pis aller*; and the plan of dipping the child's face for a few instants into cold water has not appeared to him persistent in its effects.

Streatfield (*Lancet*, Aug. 3, 1872) speaks strongly in favor of a modification of the latter plan which he has employed, viz., a cold jet of fine spray thrown for a few moments on the child's face, and he believes a part of the benefit derived from this is due to the force with which the spray strikes the lids; at the same time it is less alarming to the child than the ducking.

Treatment of Granulations by Electricity.—Schivardi (*Central-Zeitung*, July 31, 1872) publishes an account of three cases of granulations, which had existed two, three and eight years, successfully treated by the application of a current from two Bunsen's elements, the positive pole applied to the inverted upper lid by a probe-pointed sound, the negative to the back of the neck by a wet sponge. The first case is said to have been cured after five sittings, the second much improved after two, the third cured after nine. The first sitting should last only ten minutes.

Trueheart (*Medical Record*, Dec. 16, 1872) calls attention to treatment of this disease by the galvanic current, and invites experiment, but does not claim to have attained any remarkable success. For the upper lid, one electrode is placed over the middle of the eyebrow; for the lower, over the maxillo-malar articulation; the other, tipped with soft sponge or hair from a camel's-hair pencil, is brushed slightly over the inverted lid. Strength of current and length of application according to the pain excited. Three to five daily sittings generally excite enough inflammatory reaction to set in motion the absorption of diseased materials. Then the treatment must be discontinued for a few days, to be resumed when the inflammation has subsided.

Cornea.

Pathology of Corneal Inflammation.—Talma (*Graefe's Archiv*, xviii. 2) gives the result of his investigations on this much-disputed subject,

and concludes, with Cohnheim, that all pus-cells in the inflamed cornea are white blood-corpuscles which have migrated from the vessels. The methods which he used differ from those of other observers chiefly in that a portion of the corneæ to be examined were placed in a 7½ to 10 per cent. solution of sugar. In such a solution the corneal corpuscles preserve, in all important particulars, the well-known characteristics they present when the cornea has been placed in aqueous humor; the wandering cells, on the other hand, take on a nearly spherical shape, and refract light strongly. Corneæ in the most various stages of the inflammatory process, so prepared, contained only two sharply distinguished forms; spherical, strongly refracting pus-cells, and flat, branching, pale, corneal corpuscles. There were no intermediate forms, and no signs of division in the cells to be seen. In the earlier and lesser stages of the inflammation, the corneal corpuscles appeared much as in the normal condition; later, granules and small vacuoli were often to be observed in them, their outlines were paler, and, finally, with progressive softening of the tissues, they seemed to break up and disappear. He found, as did Key and Wallis,* that in the immediate neighborhood of the spot where nitrate of silver had been applied, the corneal corpuscles almost immediately afterwards were shrunken, granular, or contained vacuoli, evidently due to the direct action of the caustic. When the centre of the cornea of guinea-pigs was cauterized, examination an hour or two later showed many of the vessels at the edge of the cornea filled, others surrounded by white corpuscles, some of which had already commenced to progress into the cornea.

Cauterization of the Conjunctival Fold in Corneal Affections.—Hosch *(Monatsblatt f. Augenheilk.,* Nov., 1872) recommends the application of pure nitrate of silver to the fold of the conjunctiva, so as to produce a linear eschar, in certain cases of ulcerative affections of the cornea. He states that by this means the conjunctival congestion is rapidly diminished and vascularization of the corneal tissue promoted, and gives reports of cases, treated by this method, to show its efficacy. The treatment is only to be employed, however, where there is much swelling of the conjunctival fold, and cauterization of the tarsal portion of the lid must be carefully avoided.

Treatment of Conical Cornea.—Bader *(Lancet,* Jan. 20, 1872) reports nine cases of conical cornea operated on by removing a small oval piece, the whole thickness of the cornea, from the summit of the cone. A curved needle was first made to transfix the cone, so as to include the portion to be excised, and served to prevent direct contact of the lens with the cornea during the excision. In the first cases, a suture was drawn through and tied after the excision was made; later, this was abandoned. The eye operated on was kept bandaged about six weeks. After complete healing, iridectomy was performed. There does not seem to have been very great inflammatory reaction, except in one case, in which contact of the iris with the cornea and the folded state of the cornea produced by the suture continued for six weeks. The result in all cases was great improvement in the vision.

Bowman *(Monatsbl. f. Augenheilk.,* Sept., 1872) presented, at the International Ophthalmological Congress in London, an instrument somewhat resembling a trephine, by which he removes a circular piece

* Vide Report on Ophthalmology, this JOURNAL, Nov. 7, 1872.

from the summit of the conical cornea $\frac{1}{2}'''$–$1'''$ in diameter. He showed, also, a similar instrument contrived by Wecker.

Corneal Tumors.—Samelsohn (*Monatsbl. f. Augenheilk.*, Oct., 1872) describes a unique case of cyst of the cornea, situated between its lamellæ, so that that portion of the corneal tissue forming the inner wall of the cyst was pressed inward and encroached on the anterior chamber, while the outer wall projected strongly forward. A thin pterygium reached to the edge of the cyst, but did not seem to be connected with it, inasmuch as dissecting off the pterygium left the cyst intact. Removal of a portion of the anterior wall of the cyst was followed by cure.

Schmid (*Graefe's Archiv*, xviii., 2) describes five tumors, epithelial and sarcomatous, starting from the limbus corneæ. The chief point of interest they present is the fresh evidence of the resistance offered by Bowman's membrane to implication of the corneal tissue.

Strawbridge (*Am. Jour. of Med. Sciences*, Jan., 1873) reports a case of dermoid tumor of the cornea, not advancing far on the cornea itself, but extending backward between the inferior and external recti muscles beyond the equator of the globe.

Pigment Deposits in the Cornea.—Hirschler (*Graefe's Archiv*, xviii. 1) describes deposits of black pigment in the substance of the cornea, found in old cases of interstitial keratitis, and believes them due to a change in the hæmatin which is found in the interstitial hæmorrhages occurring during the vascular stage of this disease.

Ritter (*Monatsbl. f. Augenheilk.*, Oct., 1872), under the title of iritis pigmentosa, narrates a case in which, with pigmented posterior synechiæ, some diffuse opacity and two spots of black pigment in the posterior layers of the cornea were present. He considers that the uveal layer of the iris had been here chiefly or alone inflamed; that the corneal opacity was secondary; and that the pigment had come from the iris, been deposited on the posterior wall of the cornea, and thence found its way into the corneal tissue. The cases reported by Hirschler are regarded as of the same nature as his case, and the origin of the black pigment from hæmatin denied.

Iris and Choroid.

Cholesterine in Anterior Chamber.—Robertson (*Edin. Med. Jour.*, August, 1872) showed, at a meeting of the Medico-Chirurgical Society of Edinburgh, an eye which contained a large cyst of cholesterine in the anterior chamber. During life, the presence of floating crystals in the anterior chamber was very evident.

Irido-Choroiditis.—Schmidt (*Graefe's Archiv*, xviii. 1) narrates two cases of monocular, purulent irido-choroiditis, with chemosis of conjunctiva and exophthalmos, in both of which the sclera was perforated and a circumscribed collection of pus found under the conjunctiva near the insertion of the internal rectus. The one was a case of phthisis, the other of extensive purulent inflammation of the side of the neck and also of the knee-joint. In the latter case there was an autopsy, and besides metastatic abscesses, an old thrombus of the left jugular vein and transverse sinus was found. No emboli or purulent thrombi in the choroid. Schmidt believes that the irido-choroiditis occurring in cases of cerebro-spinal meningitis, typhoid, scarlatina, tuberculosis, &c., is more probably

due to thrombi, which have formed on account of weakness of the circulation, than to emboli, as has been considered. One-sided exophthalmos, with congestion and œdema of conjunctiva and orbital tissue, has been latterly held up as a most important symptom of thrombosis of cerebral sinus. In his case this symptom was present, but was due to the irido-choroiditis; it is only when irido-choroiditis is wanting that it can be of diagnostic value as to thrombosis of sinus, a fact which he thinks has not been sufficiently regarded, judging from reported cases.

Epithelial Cancer of Choroid (secondary).—Perls (*Virchow's Archiv*, 56, 4) reports in detail the appearances observed in a case of epithelial cancer, supposed primarily of the lung, in which nodules of the growth existed in many thoracic and abdominal organs, and also in the choroid of each eye. At the edges of the nodules in the choroid, it was evident that the capillary vessels were plugged with epithelial cells, and occasionally the plugged capillaries could be directly traced into cylinders of cells of larger size, still surrounded by a defined contour which contained nuclei resembling those of the capillary wall. Farther on, the wall enclosing the cylinders was lost, and the growth became rather an infiltration. Here the epithelial cells formed quite large, onion-like masses. The choroidal tissue formed the stroma between the cells; the internal limiting membrane and the sclera were intact.

Perls considers, from the appearances, that epithelial cells from the tumor in the lung must have been carried along by the blood current and deposited in the chorio-capillaris, where they proliferated. The nuclei of the capillaries may, perhaps, have finally taken part in the new growth; that they did not at first is shown by their perfectly normal appearance in capillaries plugged with cells.

Retina and Optic Nerve.

Retinitis Pigmentosa.—Landolt (*Graefe's Archiv*, xviii., 1) gives the results of the microscopic investigations of two cases of typical retinitis pigmentosa, both of which had been observed during life; one, indeed, having been kept under observation by Professor Horner for several years. In both, the disease had progressed to total, or nearly total, blindness. It is worthy of remark that, in neither case, were the parents related, nor were other members of the family affected. The changes found in the retina agreed with those in cases which have been previously described by others: hypertrophy of the connective tissue elements, especially of the adventitia of the vessels, their calibre at the same time being diminished, accompanying disappearance of the nervous elements, and heaping up of pigment in the retina, mostly in the walls and immediate neighborhood of the vessels. The pigmented epithelium was now changed, now wanting, and Landolt was able to convince himself that the changes in the pigment layer were in direct relation to the position of the retinal vessels. The chronic inflammatory changes occurring in the vessel-walls seem to exercise in some way a sort of attraction on the pigment, which, partly still contained in the cells, partly free, wanders in toward them. In one of Landolt's cases, there was no change in the choroid, while in the other, changes, though present, were slight. This fact is of importance, since in most, at least, of the cases hitherto reported, the choroid was

so much implicated as to give ground for the supposition that the retinal affection was only secondary. In accord with the clinical course of the disease, the changes were found most advanced toward the periphery and diminishing gradually toward the nerve. The whole process Landolt considers to be one of chronic inflammation of the retina, and especially of the walls of its vessels, commencing at the periphery and proceeding slowly backward. The disappearance of the nervous elements is secondary and a consequence of the hypertrophy of the connective tissue, and, as the deeper layers of the retina become affected, the epithelium is also involved. The choroidal changes so often found, warty thickening of the basement membrane (Leber) and alteration of its vessels and tissue, may be readily explained by the supposition of extension of the inflammation by contact. The results of examination of certain cases of retinitis pigmentosa (so called) without pigment in the retina, would seem to support the view of a primary affection of the adventitia of the vessels. In these cases, with like clinical course, only the inner layers of the retina were affected; but here, as in typical cases, the thickening of the vessels was a constant and most marked change. Finally, Landolt suggests that the disease may be analogous to a cirrhosis of the liver or kidneys, in which, also, the change commences by increased formation of connective tissue about the vessels. One of his cases died of cirrhosis of liver, with similar affection of kidneys; the other of cirrhosis of kidneys, with similar slight affection of liver and spleen.

Albuminuric Retinitis, with separation of Retinæ during Pregnancy.—Brecht (*Graefe's Archiv*, xviii. 2) reports the following interesting case. A woman, 28 years old, previously healthy, having borne one child and aborted twice, observed, while in the sixth month of pregnancy, loss of vision in the right eye. Three days later, she had epileptiform convulsions during several hours. A few days later, sight of the left eye was also affected; then swelling of ankles. Ten days after the convulsions occurred, there was found very extensive and prominent separation of the retina; right on all sides, left on all sides except inward; the discs somewhat swollen and opaque, their outlines indistinct; small white patches and hæmorrhages in the retina near the nerves; small changes in the pigment where separation did not exist. The right eye counted fingers at 1′, the left at 2½′. Urine dark, scanty, containing a large amount of albumen and fibrinous casts, with epithelium in a state of fatty degeneration. During the following twelve days the separation continued the same, but the white patches in the retina increased in number and size, and the changes in the choroid became greater; the urine became greater in quantity, but still contained much albumen. Birth of the child occurred at this time, without dangerous symptoms, and the woman's condition improved. A week afterward, the retina in either eye had resumed its normal position, except far toward the periphery at the lower part; the appearance of the retina and discs had improved, and the vision was much better. In another three weeks, albumen and casts had disappeared, and four months from birth of the child, though the discs were decidedly pale and the arteries small, and there were pigment patches in retina as well as choroid, the white patches in the retina had entirely disappeared, the field of vision was normal, and vision left $\frac{15}{20}$, right $\frac{15}{15}$. Brecht gives also two other cases which he had observed, similar to the above,

except that there was no separation of the retina, and which ran a very similar course. In one of these, vision, a year from the commencement of the trouble, was normal in both eyes; in the other, $\frac{1}{20}$ both sides, but with a defect in the field of one eye downward. The changes finally to be seen were much the same in all the cases; only in the better eye of the last case had the disc and vessels resumed their normal appearance, but here there were still some pigment changes at the periphery.

Incision of Nerve Sheath in Neuritis Optica.—Von Wecker (*Monatsbl. f. Augenheilk.*, Sept., 1872), at the International Ophthalmological Congress in London, referred to the distention of the space between the sheaths of the optic nerve with fluid coming from the arachnoid cavity, which has been shown to exist in some cases of neuritis optica. He considered that the indication in such cases was to provide a way of escape for the fluid between the sheaths, and thus to relieve the symptoms of intra-cranial pressure and the strangulation of the nerve at its entrance to the eye. To effect this, he had devised an operation, which, after practice on the cadaver, he had performed in two cases of cerebral amaurosis (probably from cerebral tumor). An incision was made between the rectus externus and inferior, one-third of an inch from the cornea, and the scissors pushed between Tenon's capsule and the globe back to the nerve; then, the wound being held open and the globe turned upward and inward by means of a spatula, the nerve sheath was incised by an instrument constructed specially for this purpose. Wecker states that the operation is easily performed, gives rise to little reaction, and, in his two cases, was followed by improvement of the headache, &c. There was no special improvement of vision.

Powers (*St. Bartholomew's Hospital Reports*) relates a case in which he had performed Wecker's operations, but there seems to have been no particular advantage gained.

Glaucoma.

Rydel, in an article in *Graefe's Archiv*, xviii., 1, calls attention to the importance of the influence which interruption of the circulation exerts on the production of blindness in glaucoma, and thinks it is not generally sufficiently appreciated. He relates the case of a patient operated on three weeks after a sudden attack of blindness from acute glaucoma (the other eye had been lost two years before by a similar attack). An iridectomy restored the clearness of the media and normal intra-ocular pressure, and there was no glaucomatous excavation, but the veins, and especially the arteries, remained very small, and only quantitative perception of light was attained. He supposes here a paralysis of the retina from lack of blood, and believes that the same thing occurs also in chronic glaucoma.

The theory that peripheric vision is primarily extinguished in this disease because the nerve fibres which go to the periphery come through the centre of the papilla, and are therefore more exposed to pressure and dragging where excavation is produced, does not appear to him satisfactory, nor to make clear why the outer portions of the periphery lose their functions sooner than the inner. His own explanation of this fact is, that the circulation is more easily checked in the vessels supplying the outer parts of the retina, on account of their greater length and smaller calibre.

Treatment of Myopia.

Schiess-Gemuseus *(Beitrag z. Therapie der Myopie,* Basel, 1872) gives the results obtained by atropinizing fifty-three patients in whom the test by glasses showed a myopia. These include twenty-nine cases previously reported by Hosch. Of one hundred and one apparently myopic eyes, eighty-six were, under the action of atropine, no longer myopic, or only so in less degree. Nine apparently myopic eyes were shown to be really hypermetropic. The treatment consisted of daily instillation of atropine, and was continued, on the average, about a month, during which time the patient wore colored glasses. In a few cases, in which there was reddening and indistinctness of the discs, blood was also taken from the temple. Eighty-one eyes thus treated were examined at intervals of from one to nine months after termination of treatment. In fifty-six the myopia remained of less degree, in seventeen it was the same as before treatment, in eight it had increased. The author concludes, from these cases, that spasm of the ciliary muscle is an important cause of acquired myopia, and that the above treatment should be generally adopted, spite of its inconvenience.

Treatment of Nictitation.

Lazarus *(Wiener Med. Presse,* Oct. 27, 1872) states that he has always been successful in the treatment of confirmed cases of this disease by the following operation. A spatula is thrust under the upper eyelid to the edge of the orbit. Then a narrow bistoury is entered on the flat at the middle of the ciliary edge, and pushed between the skin and the orbicularis to a point two lines above the edge of the orbit. The edge is now turned backward and the knife drawn out, so as to divide the orbicularis, but not the tarsus. The superior palpebral artery and vein are thus necessarily divided, and there is some extravasation, but this is soon absorbed, and the nictitation is immediately relieved.

Causes of Blindness.

Hirschberg *(Berliner Klin. Wochenschrift,* Jan. 27, 1873) gives the statistics of 101 cases of blindness observed at his clinic in the course of three and a half years. When the two eyes were lost independently, the case is given under the head of the affection by which the second eye was lost.

Congenital, 3 (of which one only became entirely blind after some years).

Ophthalmia neonatorum, 16.

Later affections of the conjunctiva (blenorrhoica, diphtheritica, granulosa), 7.

Primary of cornea, 2.

Primary of uveal tract, 6.

Glaucoma, 12.

Myopia, 6 (two from posterior staphyloma, four from separation of retina).

Retinitis pigmentosa, 2.

Atrophy of opticus (genuine), 8.

Atrophy of opticus from disease of cerebro-spinal system, 11. (Of these, two children had symptoms of meningeal inflammation, one boy had an abnormal skull, and one girl had intra-cranial tumor. Seven adults had tabes.)

Neuritis optica from intra-cranial cause, 4 children.
Carcinoma of lid, destroying one eye, spreading to brain and blinding the other, 1.
Smallpox, 9.
Nervous fever, 2.
Unknown, 5.
Injury, 7. (Of these, 3 sympathetic of second eye.)

Bibliographical Notices.

The Passions in their Relations to Health and Disease. Translated from the French of Dr. X. Bourgeois, Laureate of the Academy of Medicine of Paris, &c. By HOWARD F. DAMON, A.M., M.D. Boston: James Campbell. 1873. Pp. 201.

ON reading, in this JOURNAL, of April 30th, an editorial on indecent literature, and on its quasi respectable endorsers, we felt, at least, the satisfaction that the authors were for the most part acknowledged quacks, and that the regular profession was free from any share in the diffusion of this evil. The book before us dispels this illusion; it is trash, if not of the very worst, at all events, of a very bad kind, redeemed only by its weakness. It is in two parts; the first treats of love, the second of libertinism. The following extracts show the scientific value of the book, which certainly tells us some things we did not know before. We venture to say that most anatomists are not aware that, though "the cerebral mass predominates in man; in woman, it is the cerebellum and spinal marrow which preponderate."—(P. 18.) The physiologist may be interested by the symptoms of unbridled love. "The pulse is feeble, small, irregular, during the absence of the person loved; but, at her sight, at her remembrance, it becomes strong, tumultuous. There are on the one hand, violent palpitations of the heart, which predispose to hæmorrhages; on the other, an agonizing constriction, which oppresses the chest; chills alternate with fits of heat; sleep is short, agitated."—(P. 16.) Here is part of the "treatment of the affections engendered by disordered love." "For the consequences of violent emotions we shall employ the following remedies: *aconitum napellus*, if there is headache, flushed face, febrile movement, bleeding of the nose, or palpitation of the heart, above all in people of a sanguine temperament; *belladonna*, after the aconite, when the symptoms are not entirely dissipated, and there is joined to them a certain excitation of the brain; *chamomile (anthemis)*, in very impressionable women, in order to combat the symptoms of nervous agitation, with tremblings, faintings, exaltation of the imagination, loss of appetite, diarrhœa; *pulsatilla*, in blond women, melancholy, with irregular menses, who suffer from palpitations of the heart; *nux vomica*, in choleric men attacked by gastralgia, habitually constipated and subject to hæmorrhoids. *These medicines will be given in the dose of ten to twenty drops of the alcoholic tincture in ten tablespoonfuls of water; four tablespoonsfuls of which are to be taken daily.*"—(P. 78.) (The last italics are our own.) If the first part is silly, the second is worse; the jumble of evil consequences of libertinism is worthy of any quack's advertisement. For the professional man, the book is useless; for any other, improper reading.

We cannot forbear quoting the advice "to cause hæmorrhoids to disappear by *nux vomica, cayenne pepper (capsicum), sulphur, mercurials, sepia*, the preparations containing *sulphur*."—(P. 200.)

Such is the work by translating which, Dr. Damon, a Censor of the Suffolk District Medical Society, has seen fit to make himself notorious. The translation itself is pretty good, but some passages are delightfully naïve, as that on "Solomon forming in his palace a harem numbering seven hundred women and three hundred concubines."—(P. 90.) If Dr. Damon translated this solely for the edification of the profession, he has been guilty of nothing but wasting his time; but we cannot accept this charitable interpretation of his conduct, for in his preface he tells us that the book is for "instructors and heads of families," and an address to the reader, apparently by the author, states that "it is equally proper for married people and for young people." Such books are not new, but for one to be brought out by a censor of a prominent medical society, is as new as it is mortifying.

Manual of Chemical Analysis as applied to the Examination of Medicinal Chemicals. A Guide for the Determination of their Identity and Quality, and for the detection of Impurities and Adulteration. For the use of Pharmacists, Physicians, Druggists and Manufacturing Chemists, and of Pharmaceutical and Medical Students. By Frederick Hoffman, Ph.D., Pharmaceutist in New York. New York: D. Appleton & Co. 1873. 8vo. Pp. 393.

The object for which this book appears to have been written is, to collect together in one volume the latest and best processes for the chemical examination of drugs and medicines for the benefit of pharmacists and dispensing physicians, and this object has been successfully accomplished.

The first part of the book is devoted to a description of the necessary reagents and chemical operations, and to a very short, and necessarily incomplete, systematic course of qualitative analysis, and volumetric estimation of the most important substances, each course being disposed of in fifteen pages.

The second and important part treats of all the most important medicinal chemicals and their preparations, in alphabetical order, giving a description of their physical and chemical properties, together with the latest processes for their examination. The subjects of accidental impurities and intentional adulteration are discussed in connection with each article whenever necessary. Valuable tables are interspersed throughout the work, by means of which speedy estimations may be made of the strength of various pure solutions, such as acids, alkalies, &c., by determining the specific gravity of such solutions, and in the appendix are given tables for the conversion of the Centigrade and Fahrenheit thermometric scales and the troy and metric system of weights. The nomenclature of the last United States Pharmacopœia is adopted, corresponding to the new chemical nomenclature, as, for instance, potassii hydras instead of potassæ hydras.

The book, throughout, is an eminently practical one, all of the processes and properties being described in a clear and accurate manner, and it will prove very valuable to those who, having a good practical

knowledge of general qualitative analysis, have occasion to examine drugs and chemicals. Such previous knowledge is, however, necessary, since the short course described in the first part is too imperfect to be of any practical value. E. S. W.

Florida and South Carolina as Health Resorts. By WILLIAM W. MORLAND, M.D. Harv. 1873. Pp. 20.

WE are glad to see this paper, which appeared in the JOURNAL of July 11, 1872, re-printed in pamphlet form. The need of a comfortable refuge for our invalids during the harsh winter and spring months of this part of the country, has long been felt by the profession, and, we hope, from the indications of improvement in the care of invalids and the increase in the numbers of those who avail themselves of these resorts, by the public also. It has always been a matter of surprise to us that the enterprising sons of the north did not long ago invade these sheltered climes, and that some luxuriant spot should not have become the seat of a southern Newport or Long Branch, where the invalid might find a place of rest, and the rich American some other spot than Paris to spend his money in. A combination of circumstances, none of which are easy to be overcome, appear to have prevented this much-desired result. Apart from southern apathy, which must have checked the enthusiasm of many an enterprising northerner, the great tide of western emigration and civilization has still left almost undeveloped this remote corner of our Union. The money-making proclivities of our race have hitherto left us little time for recreation, or to look around us and enjoy the beautiful country in which we live, until, of late years, the great increase in the number of the wealthy classes has created a demand for certain luxuries which it has never before occurred to our youthful country to afford. The "solid comforts" of Europe, added to the great variety in places of resort of the kind we allude to, have drawn large crowds of our countrymen across the Atlantic. Could a tithe of the money which is spent yearly by Americans in Europe be devoted to the development of a southern "watering-place," we should doubtless soon discover that great capabilities are still lying almost dormant on the beautiful shores of the St. John's River or beneath the pines of Aiken. Those who read Dr. Morland's interesting pamphlet will find that a pioneer work has already been accomplished at Magnolia, and that Dr. Geddings has done much to make Aiken a very safe and agreeable place to send consumptives to. One great stumbling block appears to us to still remain, however, namely, the very inferior means of transportation, whether by land or sea, which are still likely to disgust the northern traveller, or to counteract whatever benefit the invalid may hope to derive at his place of destination. Until a radical change in this respect has been effected, it cannot be hoped that these southern resorts can compete with their rivals on the other side of the water.

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10 *Wandtafeln zur Anatomie des Gehörorgans.*

PRIVATE advices from Prof. Adam Politzer announce a forthcoming work bearing the above title. The plates are representations of various parts of the organ of hearing, greatly magnified and especially intended for use in the lecture room, and are arranged as follows:—

Plate 1. Outer surface of the membrana tympani.
" 2. Inner " " " "
" 3. Inner tympanic wall with the stapes, stapedius and tensor tympani and canalis Fallopii.
Plate 4. Section through the external meatus and middle ear with the ossicula and labyrinth.
Plate 5. Region of the pharyngeal opening of the Eustachian tube with the topographical relations of the structures in the naso-pharyngeal space.
Plate 6. Microscopic section of the cartilaginous portion of the Eustachian tube, highly magnified.
Plate 7. The osseous labyrinth.
" 8. Section of the osseous and membranous semicircular canals; section of the cochlea and of the canalis cochleæ; the fenestra ovalis, viewed from within, with the base of the stapes in situ; section of the stapedio-vestibular articulation.
Plate 9. The organ of Cortii, highly magnified.
" 10. Twelve typical cases of disease of the membrana tympani.
The plates are to be 70 cen. high and 57 cen. wide.

There is no question as to the value of such a work both for purposes of study and for demonstration, and the name of the author is a sufficient guarantee of the completeness end exactness of its execution. C. J. B.

BOOKS AND PAMPHLETS RECEIVED.

The Channing Home, No. 30 McLean St. Report No. 5, for the year ending April 1, 1873. Boston. Pp. 10.

Ophthalmic and Aural Surgery Reports. By Julian J. Chisholm, M.D. Baltimore. 1873. Pp. 22.

CONVULSIONS IN AN INFANT PRODUCED BY DRINKING ON THE PART OF THE NURSE.—Convulsions in young children are known to be not unfrequently induced by the habit to which their nurses are addicted of indulging in alcoholic liquors, and that this fact may be kept before the minds of physicians, it is desirable that well-attested cases of this should from time to time be put on record in the medical journals.

M. Vernay reports an interesting case in the *Lyon Médical*, to which these remarks will apply, in which an infant was seized with convulsions, which continued with unabated violence for five successive days, in spite of the administration of bromide of potassium, musk, belladonna and warm baths.

It finally transpired that the nurse was in the habit of drinking from six to eight glasses of wine in the course of the day, besides taking considerable during the night. M. Vernay, thinking that the malady of the infant might have its origin in this habit of the nurse, took care that no wine should in future be furnished her. The result was that no further trouble was experienced on the part of the child.

Prof. Leroy has called attention to the deleterious habit of certain nurses of drinking freely of brandy or wine, whenever it suits their convenience to have the children under their care sleep for a considerable length of time.

Boston Medical and Surgical Journal.

Boston: Thursday, May 8, 1873.

THE TRIAL OF THE HOMŒOPATHS.

The Board of the Massachusetts Medical Society for the trial of the homœopaths, adjourned for a fortnight, after a session of two days, to allow the accused additional time to prepare their defence. The Board sat with doors closed to all excepting members of the Society, so that it would be improper for us to give, at present, any details of the trial. Even if we did not desire to comply with the wishes of the Board, our self-respect would not permit us to imitate the daily papers in making affairs public which those who alone have the right to do so wish to keep private. We cannot disguise our surprise that, under these circumstances, the editors of reputable daily papers should be willing to publish imperfect and distorted accounts, surreptitiously obtained through the accused. The trial was held in private, according to a long-established and approved custom. What church, nay what typographical society, would wish all its proceedings in questions of discipline to be paraded in sensational reports, with prejudicial comments? The Massachusetts Medical Society has always striven to throw a veil over the sins of offending members, and if forced to expel them, to do so with quiet and decorum.

We are asked by the laity, why we cannot leave the homœopaths alone; we are told that we serve these men by giving them notoriety, and that the whole affair subjects the profession to general misrepresentation. Our answer is, that the Society considers it right, at any sacrifice, to free itself from those who dishonor it. We wish no ill to the accused, and we are indifferent to the popular clamor—we mean to do our duty, to ourselves and to the community.

When a man voluntarily joins a society, promises to abide by its by-laws, and subscribes to them with his own sign-manual, the least that can be expected of him is that he will conform to these by-laws, or, if he finds himself unable to do so, that he will peaceably withdraw. Not to do this, is conduct unbecoming and unworthy a member of any society. To remain in it while acting or believing, or professing to believe, in opposition to the letter and spirit of its by-laws, cannot be considered anything less than dishonorable. Yet such is precisely the position of the homœopathic members of the Massachusetts Medical Society.

Homœopathy is not now on trial; the medical profession throughout the world has long since decided on its merits. "It

began as a delusion, and is now rapidly ending as a fraud," said the *British Medical Journal* but a few months ago. Yet the accused are not complained of because they are, or profess to be, homœopaths, but because, becoming so, ostensibly or in reality, they do not leave the Society, as they are bound in honor to do. If, a few years ago, here in Massachusetts, a member of an "abolition" society had become a slaveholder, would his inevitable expulsion have been followed by an outcry of "persecution"? The real question is, whether the Society must forever harbor and sustain, by its influence, those who, having pledged themselves to support its objects and principles, endeavor, on all occasions, to put it in a false position before the world. That their influence is little or nothing, is not to the purpose, their animus is the same. The profession has no desire to interfere with homœopathic practitioners outside of the Society, but simply declines to consort with them. In this there is no injustice to the latter; the wonder is, that they should wish to force themselves where they are not wanted, and to put themselves under the protection of those whom they are ever ready to vilify. The cry of "persecution" will not avail long; the public will soon see the matter in its true light, though reporters and editors may prate about "star chambers" and "illiberality." The only "persecution" visible, is the misreprentation to which the Society has been subjected by "the Press," and this is of very little consequence.

Improved Glass Slide for Microscopes.—At a recent meeting of the Biological and Microscopical Section of the Academy of Natural Sciences *(Phil. Med. Times)*, Dr. D. S. Holman exhibited an improved slide for microscopes, and explained its construction and mode of manufacture. The slide in question is composed of the ordinary slip of glass, but, instead of the customary plain surface, two concave depressions are ground in the upper side, and connected by one or more shallow canals, carefully cut in such a way as to present on transverse section a gradually increasing depth. In using this slide, each excavation is to be partly filled with the fluid under inspection, and the remaining space in each is to be charged with common air; the large thin glass cover being applied so as to seal up both cavities, as well as the communicating canal. The covering glass is retained in position by atmospheric pressure. In this way is secured what is termed a double *thermal pressure chamber*, either division of which can be made to emit a minute portion of its contents through the delicate canal, and pass the same into the opposite depression, by means of the sensible heat radiated from a single finger of the operator brought near it for that purpose. The most complete control is thus obtained over even a single red blood-corpuscle, which may be arrested in the canal, held stationary under observation, and actually turned over in the focus.

Correspondence.

LONDON LETTER.

(*From our Special Correspondent.*)

Medical Women in London—The London Medical Council—The Movement for Education and Registration of Midwives—The Intentions of the Government—The Anatomy of Tubercle—The Beginnings of Life—Bastian, Huxley and Sanderson—The next Meeting of the British Medical Association.

LONDON, April 14, 1873.

LONDON has been very busy lately—that is, medical London—discussing questions of great importance in medical politics as well as in medical science. The political questions raised here have been debated in the General Medical Council and by the British Medical Association. Perhaps one of the most widely interesting of these relates to the education of women in one of the branches of medical science and practice—midwifery. Against the admission of women to medical practice generally, there is a very strong and general prejudice. Indeed, although one or two ladies have attained a recognized practice here, as medical practitioners, it is not certain that in their progress they have not rather strengthened than diminished the existing objections to female medical practice. Not by any fault of their own, for the two ladies who have reached to the heights of practice have, by a very moderate, guarded and judicious course of conduct, conciliated for themselves a large amount of personal regard and respect. But the determined efforts which have been made by a few others to follow them have been met by a still more determined resistance. The doors have been more strongly barred than before, and the chink in the portal of the Apothecaries' Society, by which Miss Elizabeth Garrett (now Mrs. Garrett-Anderson) found her way into the ranks of English practitioners, has now been closed. At Edinburgh University, a quite hopeless and fruitless struggle is carried on, the lady applicants being now further off from the possibility of realizing their wishes in that University than they were two or three years ago. Those English girls who seriously incline towards medical pursuits are, perforce, directed to foreign universities—those of Paris or Zurich.

A Woman's Hospital, officered by Mrs. Garrett-Anderson and Miss Elizabeth Morgan, flourishes, however, greatly; and if, presently, some of our English girl graduates return here, and prove by practice that the popular opinion of British physicians of the unfitness of women to become physicians is contradicted by many examples, it is possible that we may see a reaction in their favor, of which as yet there are no symptoms. A rather amusing story is current just now about Mrs. Anderson, which serves to illustrate the ground of English prejudice to feminine invasion of male pursuits. Mrs. Anderson has been married now for about two years, and as she is a person of some note, socially and professionally, she is much talked about. It was lately very generally reported that she was likely soon to be a mother. For some reason she seemed to think that such a report ought not to be allowed to pass uncontradicted, and she has adopted the remarkable step of writing to a physician, who was one of those who had repeated the rumor, denying its accuracy, and requesting that he would take proper occasion of contradicting a statement which was likely to be injurious to her practice. This seemed to me incredible, but it has been confirmed as a fact; and the notion that a married woman should think it due to herself to contradict the statement that she was *enceinte*, has a sad and serious as well as a ludicrous side to it, to those who think that the highest ambition of any woman is to become a mother, and that the greatest misfortune which can happen to her is to fail in that high mission and noble ambition of womanhood and wifehood.

Those, however, who look askance at women doctors, agree that there is a good and strong reason for wishing and helping to give a better education

and a more defined status to the large class of women who now officiate as midwives. I don't know what may be the custom with you; but we have here, as in all European countries, a very large number of poor women employed in this capacity. *Cheap midwifery* is the horror of medical men; and with our number of poor women there must always be a great demand for persons willing to undertake laborious obstetric duties among the poorest classes for very small fees. It is stated, indeed, that there are in this country an army of 10,000 midwives, and that in manufacturing towns and sparsely inhabited rural districts, from one-third to one-half of all the women are attended in their confinements by midwives. These midwives are very poor women, some of whom have had a little instruction at lying-in hospitals or in connection with maternity charities, but that is exceptional. They receive fees varying from ten shillings a little more or less. They act as midwives, nurses, and often as char-women; they fill in their time with house duties, and are commonly the wives or widows of working men. They are least dangerous perhaps when most ignorant, for then they most readily fly for help in times of difficulty and danger. But it is hard to say how immensely they add, on the whole, to the pains and dangers of complicated labors by their delays, devices and errors. Our Obstetrical Society of London have lately instituted a voluntary examination for those who wish to present themselves, but a very small number only have thus far shown any desire to avail themselves of this very easy test.

A movement, headed by Dr. Acland in the General Medical Council, by Mr. Ernest Hart in the British Medical Association, and by Dr. Aveling in the Obstetrical Society of London, has been set on foot for the purpose of inducing the Government to institute an authorized examination for midwives, to establish a public and legal register for them, and to assist in forming a sufficient number of centres of education. Mr. Stansfeld, the head of the department of public health and of public medical relief (Minister for Public Health and Poor Law Administration), has expressed himself very favorably inclined to such a scheme, and has undertaken, with other members of the Cabinet, to take the initiative in introducing a measure for the purpose under Government auspices; this alone offers a secure chance of early achievement, for Parliament is so crowded now with public bills that it is almost impossible to secure private legislation—that is, to pass bills introduced by private members—unless they be of the simplest character and quite unopposed. Mr. Stansfeld is exceptionally likely to help the measure, being the brother of one of the lady leaders of the woman's right movement, and himself a shining light in that party.

The movement is so well launched that it is really likely to come to a practically successful conclusion, if common discretion be shown in conducting it. Dr. Acland proposes, also, to form a register of female pharmacists and female nurses, and to give them an authorized status also. But there is, in truth, nothing now to prevent females from acquiring full rights as legalized, educated and registered pharmacists in this country, and three ladies are at this moment studying for the purpose. As to nurses, it does not seem necessary that any legislative interference should be made in their favor. They have almost a monopoly of that field of activity, and there are more training institutions for them than applicants for the training.

The chief scientific topic of the last fortnight has been a discussion on the Anatomy and Relations of Tubercle, in the Pathological Society of London, which has occupied three nights. But of this I must give you an account in another letter. It will mark a distinct period in pathological science here.

We have been greatly interested in the debates between Dr. Bastian, F.R.S., the author of a powerful and elaborate series of researches and arguments in favor of the doctrines of spontaneous generation, and his critics. It has been going on now for two years. At first, Bastian was treated with something of scornful rudeness by eminent biologists, such as Huxley and Tyndall; and his recent book on "The Beginnings of Life," was assailed by the younger followers of Huxley with a violence which, as usual, overshot the mark. Bastian had, among other things, demonstrated, by a long series of experiments,

that certain organic infusions, enclosed in flasks exhausted of air by ebullition, at temperatures destructive of organic life, and left in these sealed and exhausted flasks, presently swarmed with life. Lankester, and several other of our ablest young biologists, failed to confirm these experiments, and treated Bastian as a sciolist and blunderer. Dr. Sanderson, however, the head of the highest school of medical physiologists, has repeated the experiments, and has confirmed them. So have others since. It is now, therefore, necessary to show whether temperatures hitherto believed by Pasteur and others to be destructive of organic life, really are so. The Royal Society has been the scene of some animated debates lately on short notes by Bastian, in which he aims at settling this question affirmatively, and thus clinching the proof of the theory of spontaneous generation. Huxley is the Secretary of the Society, and has to read these notes. He fights his ground, however, inch by inch, and although one-half of his territory is cut away from him, he is at present far from surrendering the other. But it is very certain that the question is closing up, and men such as Darwin and Mivart, who till lately looked on with indifference, are now watching the debate with great interest, and their opinion is that Huxley has not the best of it. The Easter holidays have brought a truce. Sanderson has gone to Italy to spend the vacation amongst the physiologists of Venice and Florence. The Royal Society is closed for a fortnight, but after the vacation the contest will be renewed.

Schiff, Kolliker and Oscar Liebreich are here just now; and we expect a considerable gathering of Continental savants for the annual meeting in London of the British Medical Association, which will take place in the first week in August, under the presidency of Sir William Fergusson. We hope also to see a good number of our American brethren here on that occasion. It will be the greatest meeting which the Association has had since it was first founded. The Lord Mayor gives a special reception, and also the College of Surgeons, and the addresses are by Professors Parkes, Sanderson and Erichsen.

Medical Miscellany.

THE Annual Meeting of the Massachusetts Medical Society will take place on June 3d and 4th.

DRUG STORES IN THE UNITED STATES.—There are 14,000 drug stores in the United States, and the number of persons employed in the various branches of the drug business is estimated at 135,000.

THE Chief of the Medical Division of the Pension Office is about to make a pretty thorough reorganization of his corps of examining surgeons throughout the country, since a number of them, it is alleged, are not so prompt and careful in their duties as it is desirable that they should be.—*Phil. Med. Times.*

A TENACIOUS COLLODION FILM.—A collodion film of considerable strength may be prepared by making a concentrated solution of gun-cotton in equal volumes of ether and absolute alcohol, and adding to it a small quantity of balsam of copaiba. This collodion solution, when largely diluted with ether and alcohol, may be used for rendering linen and cotton fabrics water-proof.—*Boston Journal of Chemistry.*

THE "respectable" *Boston Daily Advertiser* of April 30th has the following passage concerning the trial of the homœopaths:—

"The proceedings were conducted with closed doors. Our reporters were enabled, however, to obtain a comparatively full report, which is presented in our news columns."

Very creditable!

THE carcass of a horse was dissected in Edinburgh a few weeks since, with the result of extracting from the stomach a large dust-ball as hard as stone, about twenty-three inches in circumference, and weighing eight pounds. The animal had been fed on mill-dust.—*Phil. Med. Times.*

THE ABUSE OF PRESCRIPTIONS.—A recent order of the *Staathalterei* of Lower Austria calls attention to the frequency with which mere copies of physicians' prescriptions are employed, in supplying medicines containing articles specially marked in the Pharmacopœia as to be used only under professional direction; and especially to the custom of midwives to use old prescriptions of ergot and its preparations. To obviate these evils, medical men are desired, when they prescribe any of the articles referred to, to add the words "ne repetatur"; and the apothecaries are not to dispense a prescription so marked more than once. Ergot is only to be supplied if the prescription have been written on the day of application or the previous day. If a prescription containing ergot is presented a second time, or after the date mentioned, the apothecary is to detain it, and inform the person presenting it that a new one is necessary.—*British Medical Journal.*

NOTES AND QUERIES.

THE AMERICAN MEDICAL ASSOCIATION. *Messrs. Editors,*—A re-formation of this Association now seems inevitable. Let not its managers waste the golden opportunity in half measures. Can any better plan be proposed than that in this JOURNAL, July 25th, 1872, p. 68? We think not. Certainly none have as yet appeared to compare with it. It is thoroughly practicable, and can be adopted without revolution or the slightest commotion. It is the only plan yet proposed that will place the Association permanently upon a truly elevated professional and scientific basis. The suggestions of the *New York Medical Record*, Chicago advocates, and others, will merely cause further failure if adopted. They do not make membership, or positions therein, sufficiently honorable or attractive. The huge "Committee on Ethics" would soon become an elephant. Such half-way measures will only prolong expiring struggles. "To save from dying" is the impending and urgent necessity of the hour. A word to the wise and experienced attendants ought to be sufficient.

WELL-WISHER.

MORTALITY IN MASSACHUSETTS.—*Deaths in sixteen Cities and Towns for the week ending April* 26, 1873.

Boston, 137—Charlestown, 19—Worcester, 20—Lowell, 19—Milford, 1—Chelsea, 3—Salem, 16—Lawrence, 10—Springfield, 6—Lynn, 20—Fitchburg, 6—Taunton, 5—Newburyport, 6—Somerville, 6—Fall River, 22—Haverhill, 8. Total, 304.

Prevalent Diseases.—Consumption, 44—pneumonia, 32—cerebro-spinal disease, 28—scarlet fever, 9—smallpox, 9.

Deaths from cerebro-spinal disease are reported as follows:—Boston fourteen, Lynn seven, Charlestown three, Lowell two, Haverhill one, Salem one. Deaths from smallpox are reported as follows: Boston three, Worcester three, Springfield, Taunton and Charlestown one each.

GEORGE DERBY, M.D.,
Secretary of the State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, May 3d, 143. Males, 76; females, 67. Accident, 4—apoplexy, 1—inflammation of the bowels, 7—bronchitis, 6—inflammation of the brain, 1—congestion of the brain 1—disease of the brain, 2—cerebro-spinal meningitis, 12—cancer, 2—cholera infantum, 1—consumption, 29—convulsions, 1—croup, 1—debility, 2—diarrhœa, 1—dropsy, 3—dropsy of the brain, 2—diphtheria, 1—erysipelas, 1—scarlet fever, 15—typhoid fever, 2—fistula, 1—homicide, 1—disease of the heart, 4—disease of the kidneys, 5—disease of the liver, 2—congestion of the lungs, 1—inflammation of the lungs, 11—marasmus, 2—old age, 6—pleurisy, 1—premature birth, 2—puerperal disease, 1—pyæmia, 2—poisoning (lead), 1—smallpox, 2—teething, 1—tumor, 1—white swelling of knee, 1—unknown, 3.

Under 5 years of age, 54—between 5 and 20 years, 15—between 20 and 40 years, 32—between 40 and 60 years, 28—over 60 years, 14. Born in the United States, 101—Ireland, 26—other places, 16.